Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137

Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-1849-19-F(R1) Plant ID: 1849

Effective Date: 04/29/2019 Expiration Date: 04/30/2024
Revision Date: 10/29/2020

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Source:	Eurofins Genomics LLC 12701 Plantside Drive Louisville, KY 40299	Owner:	Eurofins Genomics LLC 12701 Plantside Drive Louisville, KY 40299

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve (12) months and no later than ninety (90) days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant:	Single HAP	Total HAP
Tons/year:	<10	<25

Application No.: See **Application and Related Documents** table.
Public Notice Date: 09/26/2020

Permit writer: Shannon Hosey

DocuSigned by:
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Air Pollution Control Officer
10/29/2020

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FEDOOP Permit Revisions/Changes

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
O-1849-14-M	NA	10/10/2014	Initial	Initial Permit Issuance
O-1849-14-M (R1)	NA	09/29/2016	Revision	Incorporation of two new emergency generators and removal of a generator that the source never installed
O-1849-19-F	03/19/2019	04/29/2019	Signif.	• Source reclassified as a FEDOOP • Identifies new equipment, proposed new equipment and equipment that has been removed or was never installed. • Owner/source name change
O-1849-19-F(R1)	09/26/2020	10/29/2020	Signif.	Incorporating Construction Permit C-1849-0001-20-F

Construction Permit Summary

Permit No.	Issue Date	Description
C-1849-1000-19-F	02/25/2019	Installing a CFS-384 synthesizer and a BLP synthesizer
C-1849-0001-20-F	02/06/2020	Installing three production CFS-384 synthesizers and one R&D CFS-384 synthesizer

Application and Related Documents

Document Number	Date	Description
96752	01/14/2019	Confidential FEDOOP Application
96753	01/14/2019	Public FEDOOP Application
126933	12/31/2019	Confidential construction application to install three production CFS-384 synthesizers and one R&D CFS-384 synthesizer
126934	12/31/2019	Public construction application to install three production CFS-384 synthesizers and one R&D CFS-384 synthesizer

Abbreviations and Acronyms

AP-42	- AP-42, *Compilation of Air Pollutant Emission Factors, published by U.S.EPA*
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
NAICS	- North American Industry Classification System
NO_x	- Nitrogen oxides
PM	- Particulate Matter
PM_{10}	- Particulate Matter less than 10 microns
$PM_{2.5}$	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO_2	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

G1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.

G2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.

G3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.

G4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.

G5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.

G6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.

G7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result

in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.

G8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.

G9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in Section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.

G10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter, PM_{10}, $PM_{2.5}$, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; or any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA. Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.

G11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.

G12. Unless specified elsewhere in this permit, the owner or operator shall submit semi-annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All semi-annual compliance reports shall include the following per Regulation 2.17, section 3.5.

- A certification statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete", and
- The signature and title of a responsible official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

Reporting Period	**Report Due Date**
January 1 - June 30	August 29
July 1 - December 31	March 1 of the following year

G13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
1.18	Rule Effectiveness
1.19	Administrative Hearings
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.04	Construction or Modification of Major Sources in or Impacting Upon Non-Attainment Areas (Emission Offset Requirements)
2.05	Prevention of Significant Deterioration
2.06	Permit Requirements – Other Sources
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
3.01	Ambient Air Quality Standards
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.04	Particulate and Sulfur Dioxide Reduction Requirements
4.05	Hydrocarbon and Nitrogen Oxides Reduction Requirements
4.06	Carbon Monoxide Reduction Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

G14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
2.17	Federally Enforceable District Origin Operating Permits
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

G15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.

G16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.

G17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

Air Pollution Control District
701 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137

Plantwide Requirements

Plantwide Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
2.17	Federally Enforceable District Origin Operating Permits	1 through 9
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 5

DISTRICT-ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Plantwide Specific Conditions

S1. Standards
[Regulation 2.17, section 5.1]

a. HAP

i. The owner or operator shall not allow or cause the plantwide emissions of any single HAP to equal or exceed 10 tons during any consecutive 12-month period. [Regulation 2.17, section 5.1]

ii. The owner or operator shall not allow or cause the plantwide total HAP emissions to equal or exceed 25 tons during any consecutive 12-month period. [Regulation 2.17, section 5.1]

b. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be *de minimis*.
[Regulations 5.00 and 5.21]

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. HAP

The owner or operator shall, monthly, calculate and record the plantwide consecutive 12-month emissions of each single HAP and total HAP for each month in the reporting period.

b. TAC

The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to, SDS, analysis of emissions, and/or modeling results.

S3. Reporting
[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

i. The owner or operator shall report the consecutive 12-month plantwide emissions of each individual HAP for each month in the reporting period.

ii. The owner or operator shall report the consecutive 12-month plantwide emissions of total HAP for each month in the reporting period.

b. TAC

Any TAC emissions that were greater than the *de minimis* level or a negative declaration.

Emission Unit U1, U2, U3, U4: Synthesis Process, Parr Deprotection System, Elution and Purification Process, Waste Transfer Process

U1, U2, U3, U4 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 5

DISTRICT-ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

U1, U2, U3, U4 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
EU U1, Synthesis Process: Manufacture of DNA synthesis products					
EP01E	CFS-96 Synthesizer, Five Lund LLC	2017	7.25, STAR	NA	S1
EP01F	CFS-96 Synthesizer, Five Lund LLC	2017	7.25, STAR	NA	S1
EP01G	CFS-96 Synthesizer, Five Lund LLC	2018	7.25, STAR	NA	S1
EP01I	CFS-384 Synthesizer, Five Lund LLC	2019	7.25, STAR	NA	S1
EP01J	BLP1 Synthesizer, Dr. Oligo	2016	7.25, STAR	NA	S1
EP01K	BLP4 Synthesizer, Dr. Oligo	2016	7.25, STAR	NA	S1
EP01L	BLP5 Synthesizer, Dr. Oligo	2016	7.25, STAR	NA	S1

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
EP01M	BLP7 Synthesizer, Dr. Oligo	2016	7.25, STAR	NA	S1
EP01N	Oligomaker, TAGC	2016	7.25, STAR	NA	S1
EP01O	Oligomaker, TAGC	2016	7.25, STAR	NA	S1
EP01P	BLP8 Synthesizer	2019	7.25, STAR	NA	S1
EP01Q	CFS-384 Synthesizer, Eurofins Genomics for Research and Development	2020	7.25, STAR	NA	S1
EP01R	CFS-384 Synthesizer, Eurofins Genomics	2020	7.25, STAR	NA	S1
EP01S	CFS-384 Synthesizer, Eurofins Genomics	2020	7.25, STAR	NA	S1
EP01T	CFS-384 Synthesizer, Eurofins Genomics	2020	7.25, STAR	NA	S1
EU U2, Parr Deprotection System: Deprotection of oligonucleotide intermediates					
EP02A	Parr #1 Vessel, Paar Instrument Company	2016	7.25, STAR	NA	S2
EP02B	Parr #2 Vessel, Paar Instrument Company	2016	7.25, STAR	NA	S2
EP02C	Biolytic Parr #1 Vessel, Paar Instrument Company	2016	7.25, STAR	NA	S1
EP02D	Biolytic Parr #2 Vessel, Paar Instrument Company	2016	7.25, STAR	NA	S1
EU U3, Elution and Purification Process: Elution and purification of oligonucleotides					
EP03A	TECAN 1 robot	2016	7.25, STAR	NA	S1
EP03B	TECAN 2 robot	2016	7.25, STAR	NA	S1
EP03C	TECAN 3 robot	2016	7.25, STAR	NA	S1
EP03D	TECAN 4 robot	2016	7.25, STAR	NA	S1
EP03E	#1 Hamilton LHR robot	2016	7.25, STAR	NA	S1
EP03F	#2 Hamilton LHR robot	2016	7.25, STAR	NA	S1
EP03G	Mini Dispenser robot	2016	7.25, STAR	NA	S1
EP03H	HPSF Machine robot	2016	7.25, STAR	NA	S1
EU U4, Waste Transfer Process					
EP04	4 Waste Storage Totes	2016	7.25, STAR	NA	S3

U1, U2, U3, U4 Specific Conditions

S1. Standards
[Regulation 2.17, section 5.1]

a. HAP

See Plantwide HAP Conditions.

b. TAC

See Plantwide TAC Conditions.[1]

c. VOC

i. The owner or operator shall operate all laboratory process equipment, ventilation system, vacuum pump system, and waste transfer equipment according to manufacturer specifications.[2]
[Regulation 7.25, section 3.1] [BACT]

ii. The owner or operator shall use the least amount of VOC containing materials needed.[3] [Regulation 7.25, section 3.1] [BACT]

iii. The owner or operator shall store all bulk VOC containing materials in closed containers when not in use. This includes materials such as solvents, reagents, cleaning materials, and waste materials including rags/wipes/paper used to clean the lab.[3] [Regulation 7.25, section 3.1] [BACT]

iv. The owner or operator shall clean up all spills of any VOC containing materials. If the spill is significant (i.e. more than one gallon), the owner or operator shall notify maintenance or professionals for assistance.[3]
[Regulation 7.25, section 3.1] [BACT]

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

[1] Potential emissions of methylene chloride, acetonitrile, methanol, and triethylamine are below de minimis levels. These are currently the only TACs emitted from these processes.

[2] Eurofins Genomics submitted a BACT analysis on 01/14/2019 and 12/31/2019.

a. HAP

See Plantwide HAP Conditions.

b. TAC

See Plantwide TAC Conditions.

c. VOC

i. For emission points subject to Regulation 7.25, the owner or operator shall monitor and maintain facility-wide records of all VOC containing materials used during each calendar month.

ii. The owner or operator shall monthly inspect all laboratory process equipment, ventilation system (including the fan), vacuum pump system, and waste transfer equipment to ensure the equipment is operated in accordance with the manufacturer's specifications and for signs of damage, air leakage, corrosion, or other equipment defects and repair/replace defective components as needed. The owner or operator shall monitor and maintain monthly records of the results.

iii. The owner or operator shall maintain SDS or other data sheets provided by the material manufacturer or its agent and shall include as a minimum:

(1) Designation of VOC content as supplied, expressed in lbs/gal, less water and excluded solvents,

(2) Designation shall include, as a minimum: the CAS registry number of the component; the weight percent of the component; and the weight of the product, expressed in lbs/gal, or alternately, the specific gravity of the product, and

(3) Other pertinent physical and chemical data necessary to determine compliance with District regulations.

S3. Reporting
[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

See Plantwide HAP Conditions.

b. TAC

See Plantwide TAC Conditions.

c. VOC

There are no reporting requirements for this equipment.

Emission Unit U7: Emergency Generators

U7 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	60.4205(b), 60.4202(f)
40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	60.4207(b), 60.4211(c), 60.4211(f)

U7 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
EP07A	One (1) Caterpillar (CPX) diesel fired (Compression) emergency generator rated at 762 HP (500 KW) with a displacement of 2.53 liters per cylinder, rated engine speed of 1800 RPM, and fuel consumption of 31.2 gal/hr.	2016	40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ	NA	NA
EP09A	One (1) FPT Industrial (FPX) diesel fired (Compression) emergency generator rated at 530 HP (350 KW) with a displacement of 2.15 liters per cylinder, rated engine speed of 1800 RPM, and fuel consumption of 27.02 gal/hr.	2016	40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ	NA	NA

U7 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. SO_2

Owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder (EP 07A & EP 09A) that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel and is subject to the following per-gallon standards:
[40 CFR 60.4207(b)]

i. Sulfur content: 15 parts per million (ppm) maximum for nonroad (NR) diesel fuel. [40 CFR 80.510(b)(1)(i)]

ii. A minimum cetane index of 40; or [40 CFR 80.510(b)(2)(i)]

iii. A maximum aromatic content of 35 volume percent.
[40 CFR 80.510(b)(2)(ii)]

b. Unit Operation[3]

i. A new or reconstructed stationary RICE located at an area source must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for such engines under 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6590(c) and 40 CFR 63.6590(c)(1)]

ii. Owners and operators of 2007 model year and later emergency stationary CI ICE (EP 07A & EP 09A) with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
[40 CFR 60.4205(b)]

iii. Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE greater than or equal to 37 KW (50 HP), to the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine

[3] Generators EP 07A and EP 09A are subject to 40 CFR 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, because they are stationary reciprocating internal combustion engines (RICE) located at an area source of HAP emissions. Per 40 CFR 63.6590(c), these generators meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII. No further requirements apply for such engines under 40 CFR 63 Subpart ZZZZ.

power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.[4]
[40 CFR 60.4202(a)(2)]

iv. Exhaust emissions from engines EP 07A & EP 09A each may not exceed the following: [40 CFR 89.112(a)]

	CO (g/KW-hr)	PM (g/KW-hr)	NMHC + NOx (g/KW-hr)
EP07A	3.5	0.20	4.0
EP09A	3.5	0.20	4.0

v. Exhaust opacity from compression-ignition nonroad engines must not exceed: [40 CFR 89.113(a)]

(1) 20 percent during the acceleration mode; [40 CFR 89.113(a)(1)]

(2) 15 percent during the lugging mode; [40 CFR 89.113(a)(2)]

(3) 50 percent during the peaks in either the acceleration or lugging modes. [40 CFR 89.113(a)(3)]

vi. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]

vii. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4205(b), you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]

viii. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60.4211(f), any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 60.4211(f) (f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
[40 CFR 60.4211(f)]

(1) There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]

[4] A Certificate of Conformity was received with the application dated July 5, 2016.

(2) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3)]

(3) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
[40 CFR 60.4211(f)(3)(i)]

(a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
[40 CFR 60.4211(f)(3)(i)(A)]

(b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
[40 CFR 60.4211(f)(3)(i)(B)]

(c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
[40 CFR 60.4211(f)(3)(i)(C)]

(d) The power is provided only to the facility itself or to support the local transmission and distribution system.
[40 CFR 60.4211(f)(3)(i)(D)]

(e) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
[40 CFR 60.4211(f)(3)(i)(E)]

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. SO_2

The owner or operator shall maintain records of the fuel SDS sheets and sulfur content of fuel purchased.

b. Unit Operation

i. The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]

ii. The owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

S3. Reporting
[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. SO_2

There are no reporting requirements for this equipment.

b. Unit Operation

If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP (EP 07A & EP 09A) that operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), you must submit an annual report according to the following:

i. The report must contain the following information: [40 CFR 60.4214(d)(1)]

(1) Company name and address where the engine is located. [40 CFR 60.4214(d)(1)(i)]

(2) Date of the report and beginning and ending dates of the reporting period. [40 CFR 60.4214(d)(1)(ii)]

(3) Engine site rating and model year. [40 CFR 60.4214(d)(1)(iii)]

(4) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [40 CFR 60.4214(d)(1)(iv)]

(5) Hours spent for operation for the purposes specified in 40 CFR 60.4211(f)(3)(i) (non-emergency), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [40 CFR 60.4214(d)(1)(vii)]

ii. Annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. [40 CFR 60.4214(d)(2)]

iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the District. [40 CFR 60.4214(d)(3)]

Insignificant Activities

Equipment	Qty.	PTE (tpy)	Regulation Basis
Natural Gas Hot Water Boiler, 0.81 MMBtu/hr[5]	1	NO_X = 0.35	Appendix A to Regulation 1.02, section 1.1
Reagent Hood (laboratory venting)	1	NA	Appendix A to Regulation 1.02, section 3.11
Diesel Tanks AST 1001 gallons 693 gallons	2	VOC = 0.0011 0.00078	Appendix A to Regulation 1.02, section 3.25

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.

2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.

3. The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.

4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.

5. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.

6. The District has determined that no monitoring, recordkeeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

[5] The heat input capacity for the boiler is less than 1.0 MMBtu/hr; therefore, it is not subject to District Regulation 7.06.